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Proposed Concept for Operational Level Military Deception and OPSEC Planning and Monitoring

Patrick Allen

14 June 2005

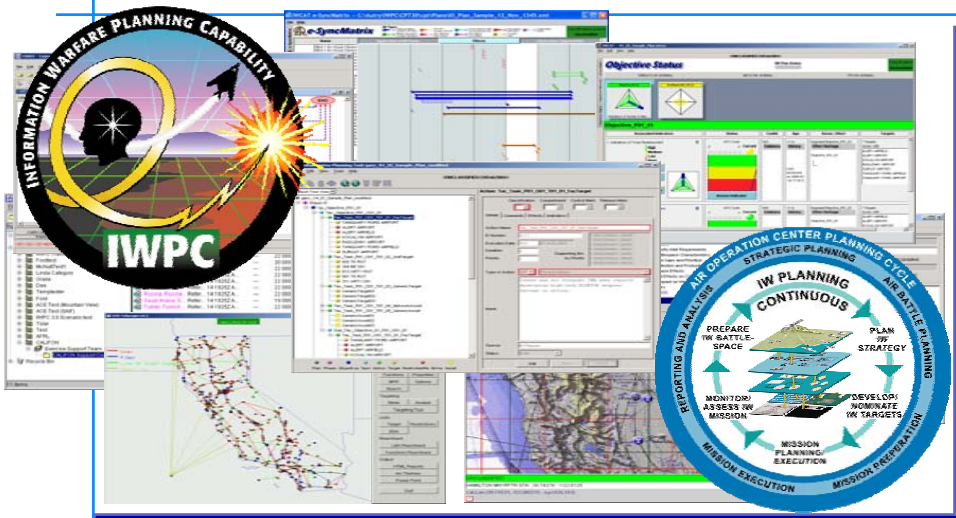
Situation Overview

- Two of the five key pillars of IO are Military Deception (MD) and Operations Security (OPSEC)
  - ↗ DoD IO Roadmap defines them as core capabilities of IO
- At Phoenix Challenge in March ’04, Col. Dick from STRATCOM described the fact that Military Deception planning is often not done, and OPSEC does not seem to be centrally planned
- Some Combatant Commands do not have a Military Deception plan or planner
- Unlikely to plan and execute an ODS left hook

Current IWPC Planning Capabilities

- IWPC can currently represent action level Military Deception or OPSEC plan elements
  - ↗ Select an option for MD or OPSEC action
- We do not yet have a way to plan and monitor success of operational level MD and OPSEC
  - ↗ Could not do an ODS left hook or Normandy Invasion level of MD or OPSEC plan
- Need a way to clearly define and encourage the planning of MD and OPSEC in a standard, reproducible, measurable and auditable way

Why use IWPC or IOPC-J as the Platform?



Current Mission & Characteristics

IWPC integrates and synchronizes full-spectrum IO analysis, planning, execution & assessment into the Falconer AOC and Numbered AFs during deliberate & crisis action planning and joint targeting cycle. SECDEF recommended Services expand IWPC to be the joint IO planning system.

Collection of Collaborative Tools

- **Provides GUIs tailored to specific planning cells**
- **Applications share a common database**
- **Operations conducted at multiple levels of security**
- **Supports planning for both kinetic and non-kinetic options**

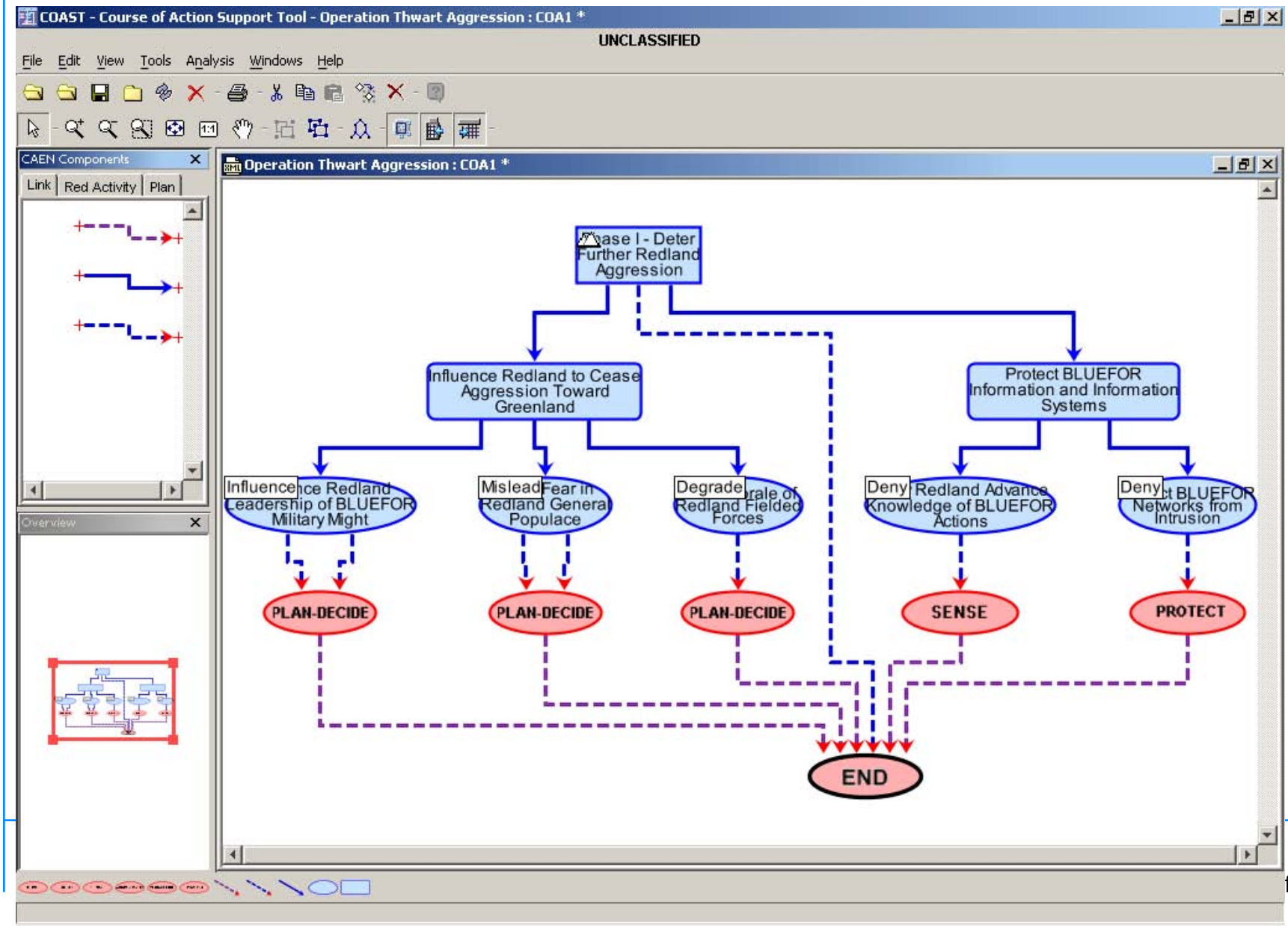
Ongoing Advances

SPO: OL-ESC/SRNT, IO Systems

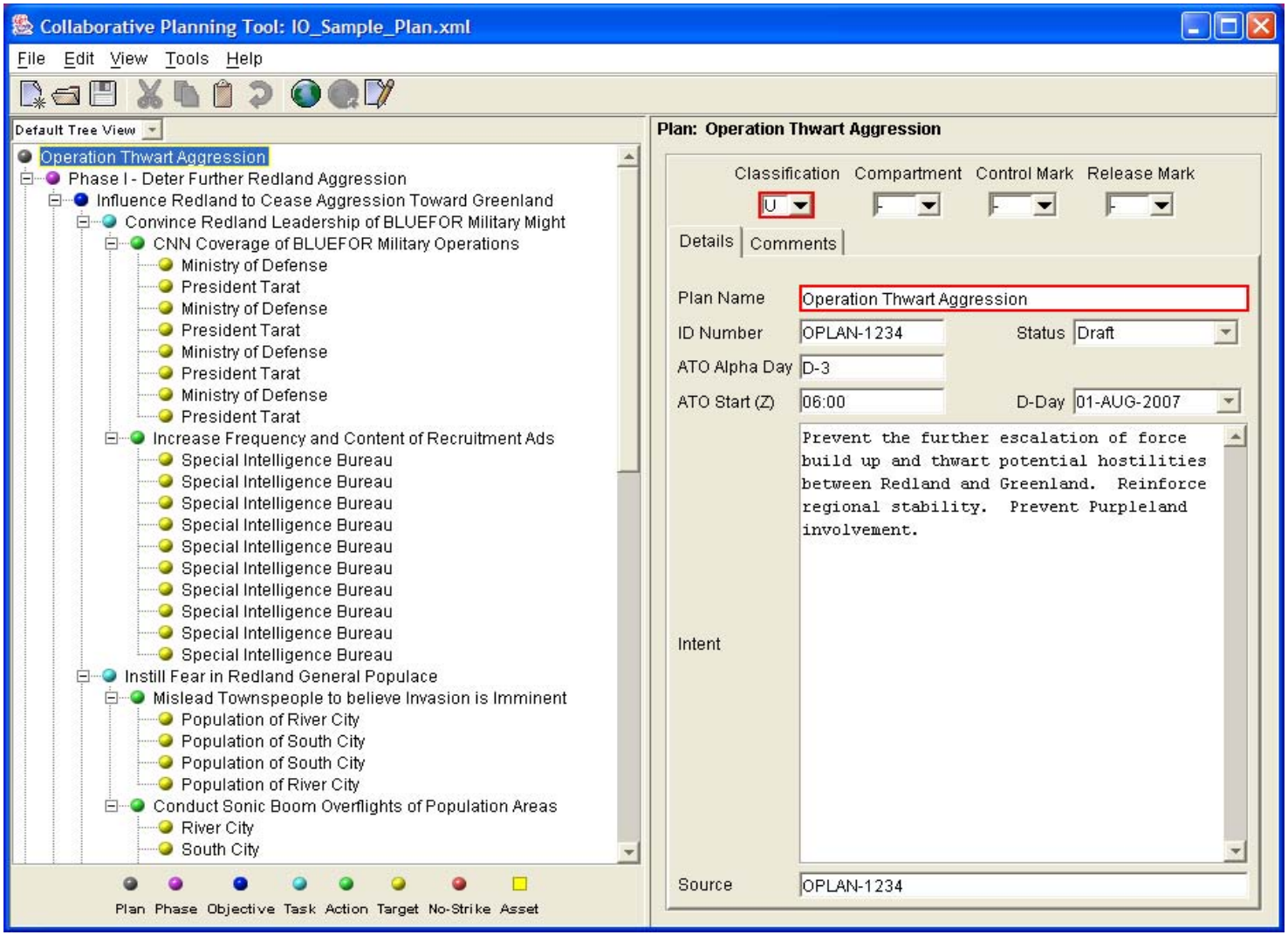
Status: IWPCv4.0 being fielded; wrapping up DT/OT in 2005; v4.2 being delivered

- **Evolve IWPC to Joint Integrated Planning Capability (IOPC-J) FY06+**
- **Selected for AOC strategy planning for EBO/PBA strategy**
- **COCOM EPB use in experiments/exercises**

COAST Cause-and-Effect Network (CAEN)



CPT Sample Strategy-to-Task Tree



Various COAs Compared and Plan Selected

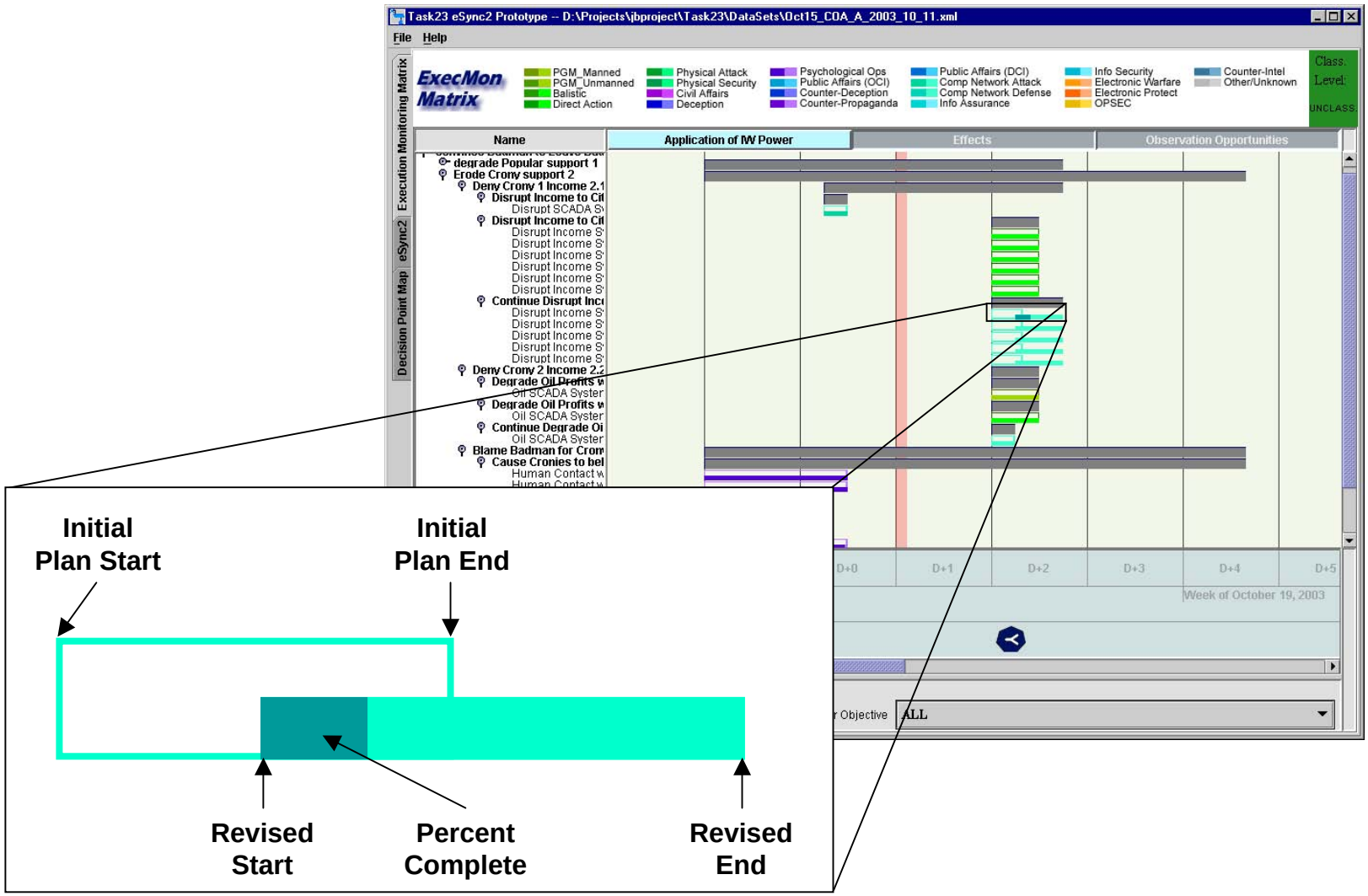
COA Comparison Info

COA Summary | Sensitivity Analysis | Monte Carlo

Variable Name	Course Of Action 1	Course Of Action 2	Course Of Action 3
COA Name	Main Objective COA A	Main Objective COA B	Main Objective COA C
COA Rank			
Score without ROEs	0.61	0.571	0.312
Score with ROEs	0.548	0.464	0.241
Probability of Success	0.291	0.338	0.317
Degree of Success	0.34	0.36	0.35
Confidence	0.9	0.9	0.9
Minimum Time	0.0	0.0	0.0
Maximum Time	0.0	0.0	0.0
Estimated Time	0.0	0.0	0.0
Duration	Until Repaired: Neutralized	Until Replaced: Neutralized	Until Replaced: Neutralized
Geo Extent	Within Target Nation	Within Target Nation	Immediate Target Area
Func Extent	Intentional Multifunction	Intentional Multifunction	Intentional Multifunction
Intensity	Enemy Military Assets Only	Enemy Military Assets Only	Enemy Military Assets Only
Weapon Precedence	Conventional	Conventional	Conventional
Probability of Detection	1.0	1.0	1.0
Probability of Attribution	1.0	1.0	1.0
Probability of Collateral Damage	0.3	0.2	0.7
Probability of Secondary Effects	0.25	0.15	0.5
Business Gain	Not expected	Not expected	Not expected
Business Loss	Not expected	Not expected	Not expected
Intelligence Gain	Not expected	Not expected	Not expected
Intelligence Loss	Not expected	Not expected	Not expected
Technology Gain	Not expected	Not expected	Not expected
Technology Loss	Not expected	Not expected	Not expected
Proportionality	Exceeds Guidelines	Exceeds Guidelines	Exceeds Constraints

Edit Score Calculation | Close

Sample of IWPC's Execution Monitoring Tool



Proposed Solution

- We are proposing a way to modify COAST CAENs and CPT trees to:
  - ↗ Encourage creation of a MD plan that is credible and supports achievement of selected plan
  - ↗ Define what and how to measure key elements and the success of the MD plan
  - ↗ Encourage the creation of an operational level OPSEC plan based on indicators of the real plan we want to hide
  - ↗ Define what and how to measure key elements and the success of the OPSEC plan

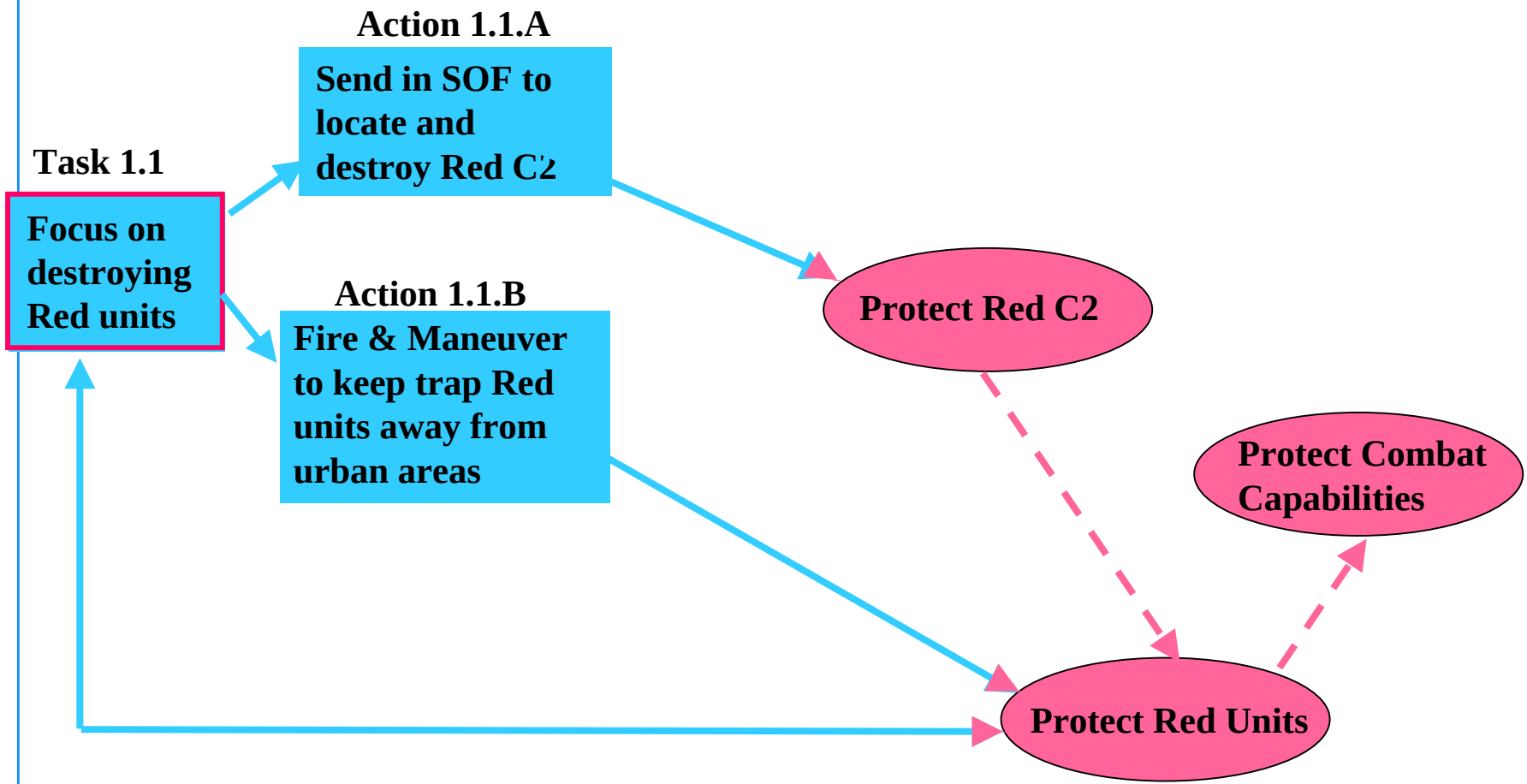
Military Deception Planning Approach

- The MD plan must be a credible operational option that the enemy thinks we may employ
  - ↗ Calais vs Normandy in WWII
  - ↗ Amphib landing vs left hook in ODS
- Approach: Use one of the non-selected COAs developed during planning as basis of MD plan
  - ↗ Already in electronic format
  - ↗ The plan we aren't using is the one we are trying to convince the enemy we are actually using
- Key is to determine what we want enemy to see of the MD Plan that is different from real plan
  - ↗ Leads to indicators and measurables for MD plan

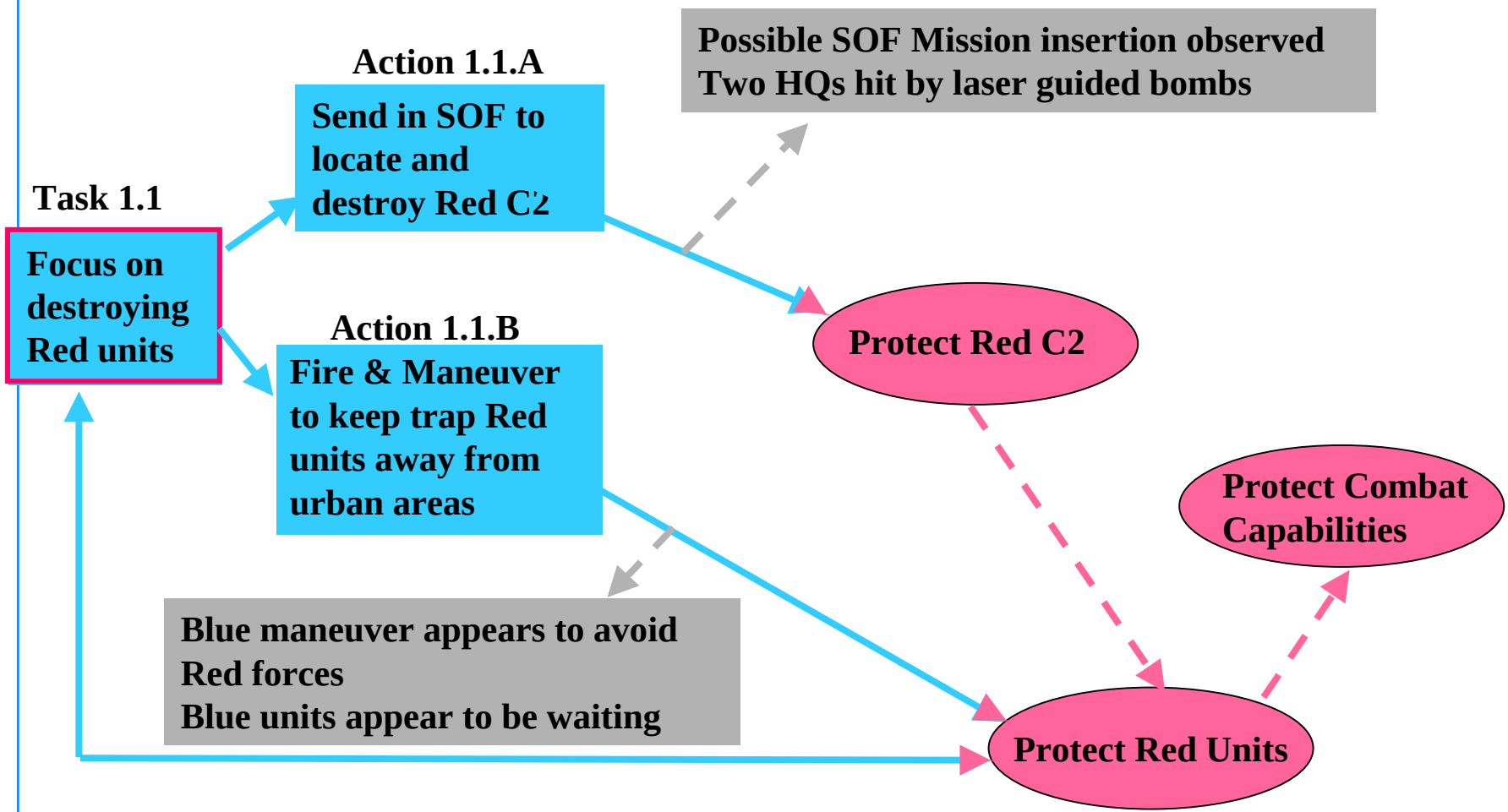
Military Deception Planning Approach Cont'd

- Approach focuses on those elements of MD plan that we want enemy to see, and measure whether & when we think enemy saw them
  - ↗ Often confirmable via other intel sources
  - ↗ Displays based on indicators and detection status
- Displays of CAENs, CPT, e-Synch, IWCAT, and EMT will all need to be modified to support MD planning and execution monitoring
- Track the achievement of MD actions and measures of likely/known enemy detections

Non-selected Plan Segment for MD Planning



Non-selected Plan Segment for MD Planning



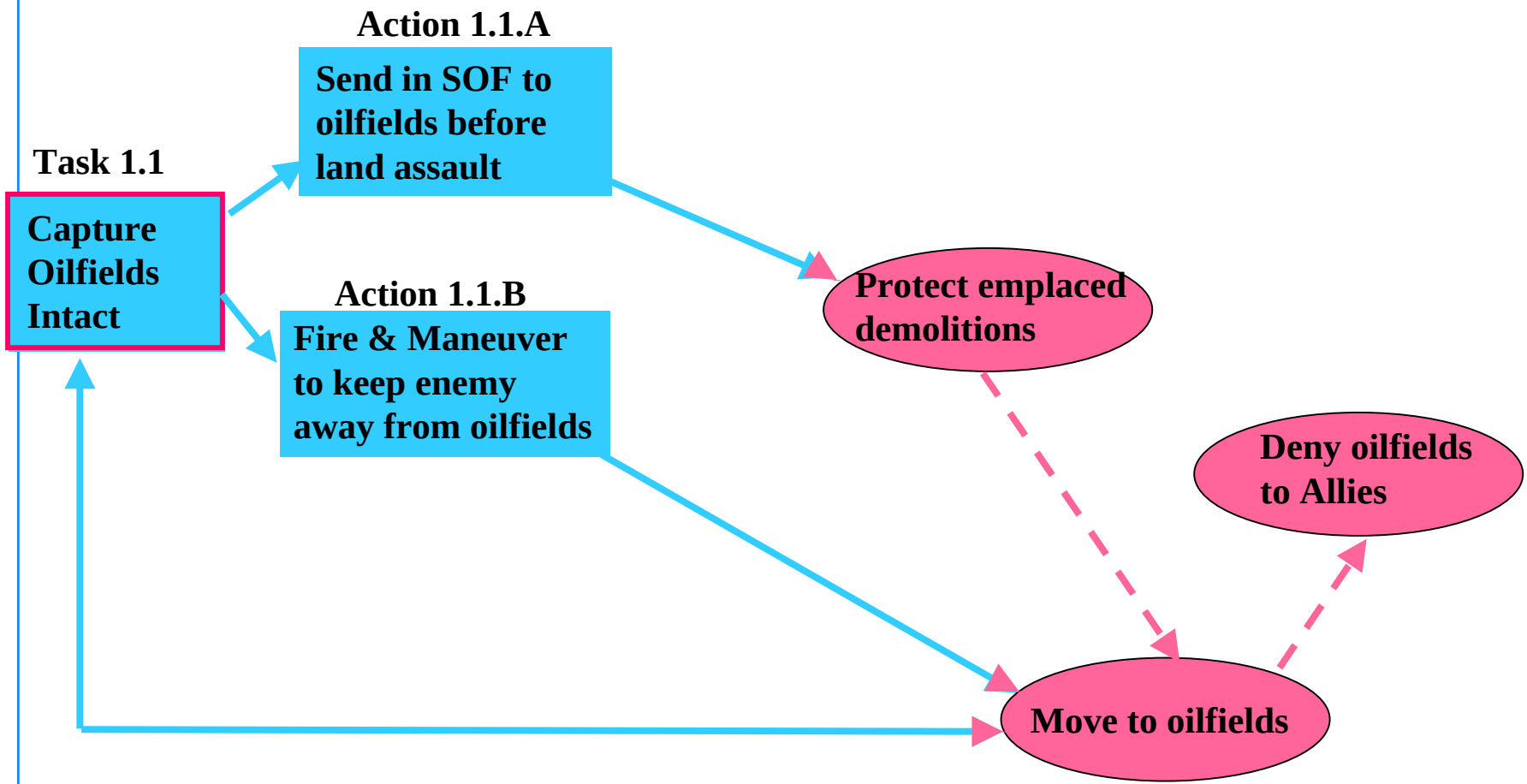
Sample Drill-Down Displays for MD

Task 1.1: Focus on destroying Red Units	Red Sensor and HQs to stimulate/feed info	Current Measure of Success
Action 1.1.A.1: Possible SOF Mission insertion observed	Red Sensor Type 1 Red Sensor Type 2	SIGINT Confirms observation Not flying; no detection
Action 1.1.A.2: 2 HQs hit by laser guided bombs	Higher Red HQs	Press release of HQs being hit by laser guided bombs
Action 1.1.B.1: Blue maneuver units appear to be avoiding Red Units	Red Sensor Type 2 Red Sensor Type 3	Not flying; no detection No confirmation yet
Action 1.1.B.2: Blue units appear to be waiting	Red Sensor Type 3 Nearest Red HQs	No confirmation yet Media interview of troops waiting to advance

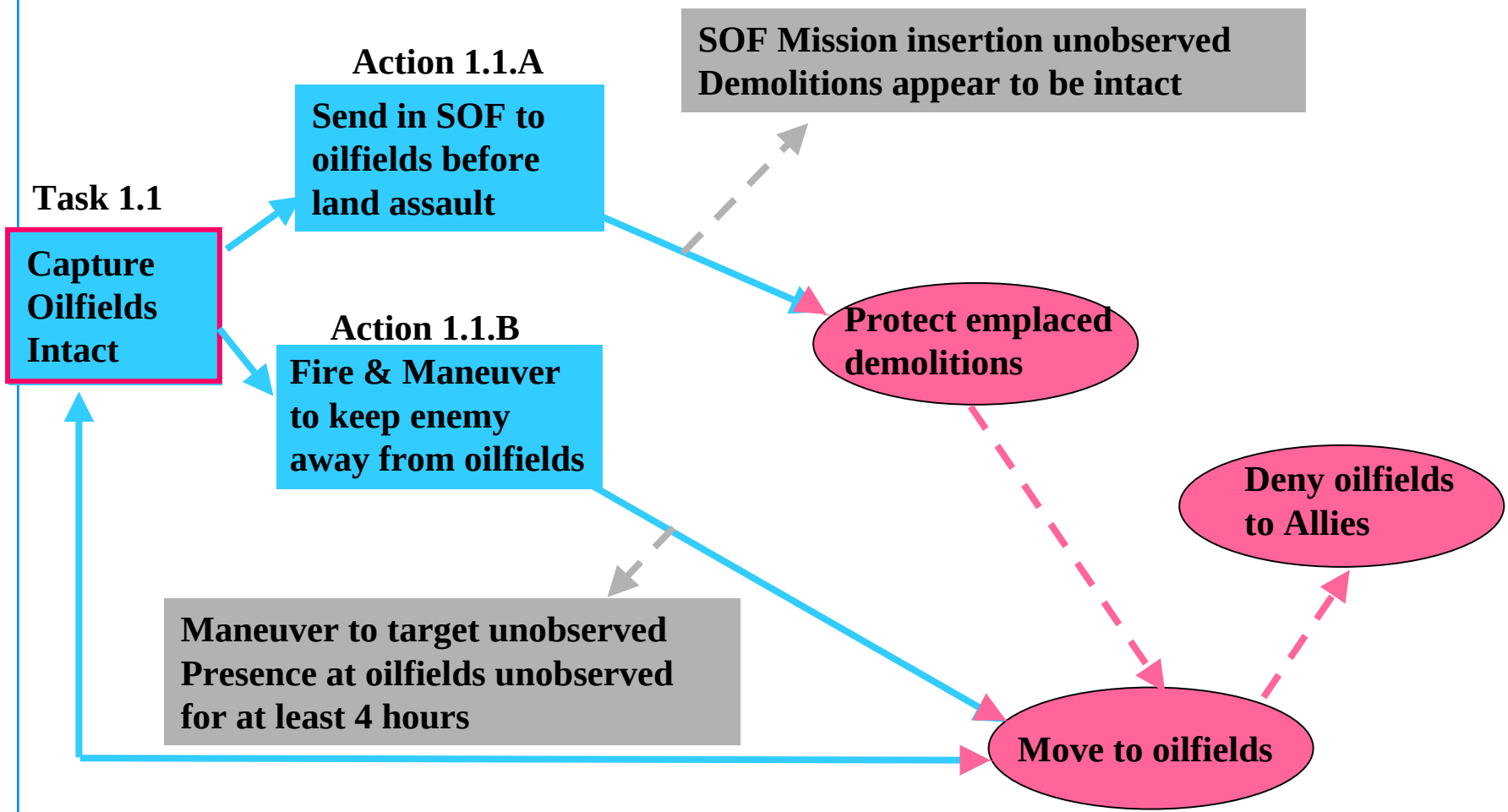
OPSEC Planning Approach

- OPSEC follows a similar principle of focusing on what the other side wants to see and whether we think/know he has seen it
- However, OPSEC takes the REAL plan and determines what we DON'T want enemy to see
  - ↗Already in electronic format
  - ↗Should be defined in comparison to MD plan
- Define key features of real plan enemy should not see so they don't see something contrary to MD plan
- Track what we think the enemy has seen of real plan over time

Part of Selected Plan to Start OPSEC Planning



Sample Modified CAEN Display for OPSEC



Sample Drill-Down Displays for OPSEC

Task 1.1: Capture Oilfields Intact	Red Sensor and HQs to Block	Current Measure of Success
Action 1.1.A.1: SOF Mission insertion unobserved	Red Sensor Type 1 Red Sensor Type 2	No SIGINT reports of event Not flying
Action 1.1.A.2: Demolitions appear to be intact	Red Guards & Eng's	Cut wires not replaced
Action 1.1.B.1: Maneuver to target unobserved	Red Sensor Type 2 Red Sensor Type 3	Not flying Not started
Action 1.1.B.2: Presence at oilfields unobserved for at least 4 hours	Red Sensor Type 3 Nearest Red HQs	Not started Comms jamming capability in place

New Measures for MD & OPSEC

- Defining what enemy should see of MD plan and should not see of real plan (OPSEC) defines the measurables for success in MD and OPSEC
  - ↗ MD: we measure what we think enemy has seen or not seen of what we want them to see
  - ↗ OPSEC: we measure what we think the enemy has seen or not seen of what we don't want them to see of the real plan
- Then we can compare which one we think the enemy believes and try and get confirmation
  - ↗ MD plan doesn't have to be perfect, just better than any failures of OPSEC

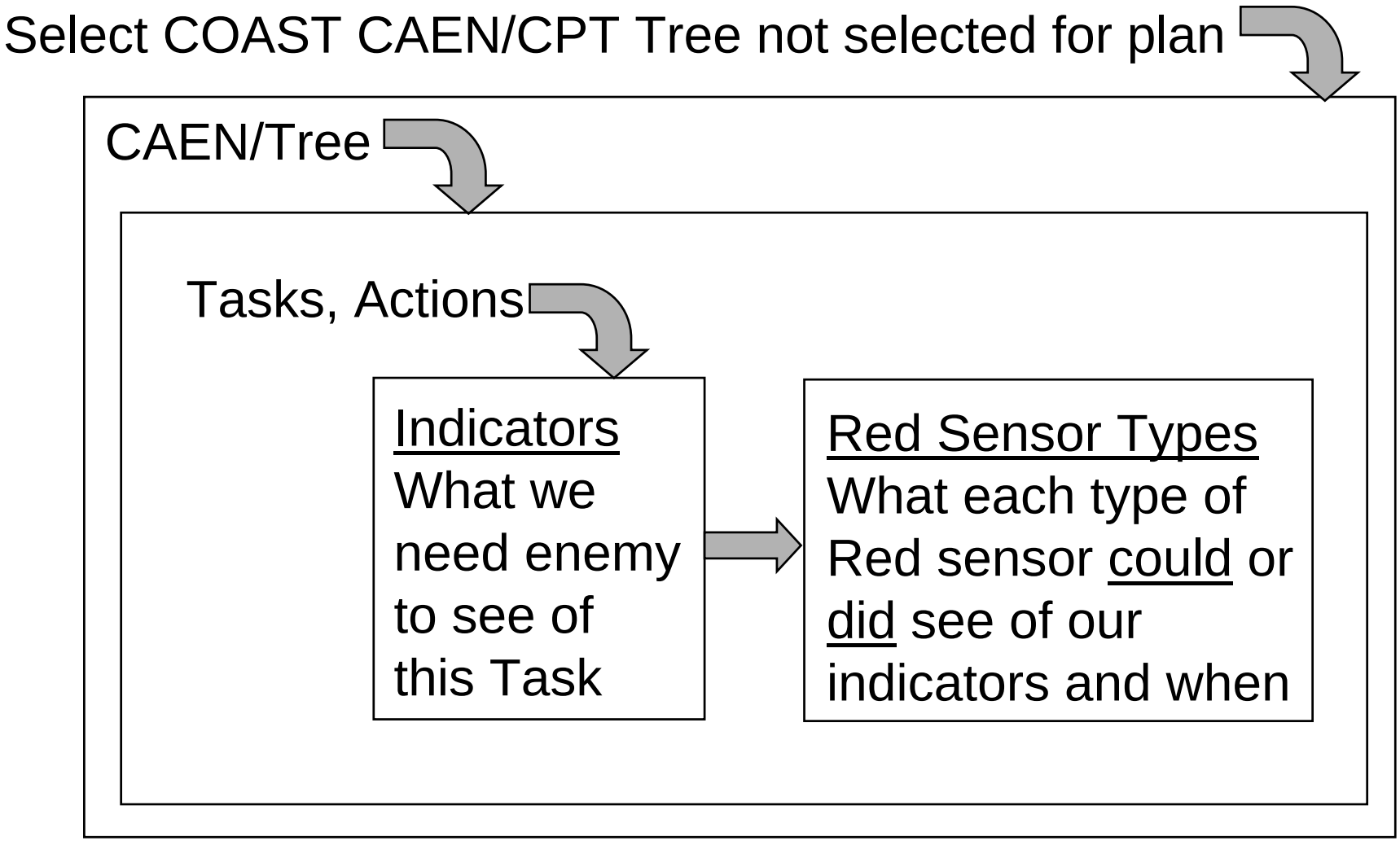
MD and OPSEC Additional Issues

- Part of MD is making sure the other side does NOT stumble across obvious deception steps
- Part of OPSEC is making sure other side does NOT stumble across real plan feature that contradicts the MD plan
- However, we can use the “obvious dummy” trick to help hide a real feature we may think the enemy discovered
  - ↗ WWII Japanese dummy aircraft example
  - ↗ If we have a leak, pretend it was an obvious ploy

Development Approach

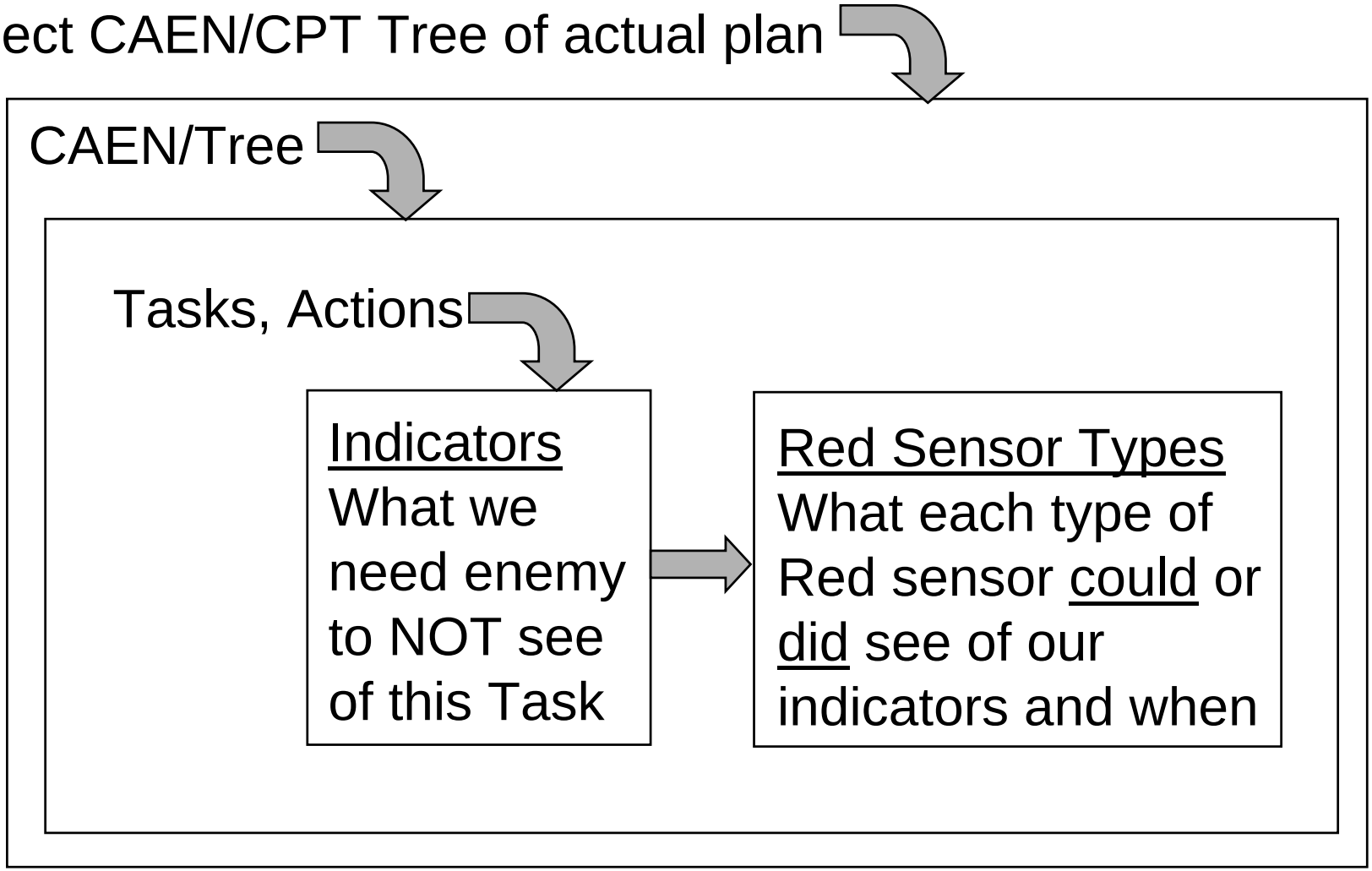
- We are planning to add operational level MD and OPSEC planning to IWPC's existing tool suite, or the IOPC-J follow-on suite
  - ↗ Indicators for MD (what enemy should see) and OPSEC (what enemy should not see) to COAST, CPT, EMT, eSynch, IWCAT, and the database
  - ↗ Define how enemy could detect these indicators
  - ↗ Estimate whether enemy has detected these indicators
  - ↗ Define RFIs to see whether enemy believed the MD plan more than real plan "leaks"
  - ↗ Estimate whether the enemy has seen too many leaks of OPSEC to be fooled by MD Plan

Sample Process for MD Modifications



Sample Process for OPSEC Modifications

Select CAEN/CPT Tree of actual plan



Summary

- Military Deception and OPSEC are two of the core IO capabilities, and have significant impact on the success of the selected operational plan
- We can define, document, and measure in IWPC/IOPC-J what we need to hide of the real plan with OPSEC and what the enemy needs to see of the MD plan
- We can estimate OPSEC leaks seen by enemy and whether key elements of MD plan have been observed
- The MD plan and execution don't have to be perfect, just better than any failures of the OPSEC plan and its execution